

ITEM 403



STORM SEWER JUNCTION BOXES AND INLETS

This item shall govern for the construction of junction boxes and inlets complete in place or to the stage detailed on the plans, including furnishing and installing frames, grates, rings and covers. Unless otherwise shown on the plans, the contractor may furnish precast junction boxes, inlets, and risers (stage II). Alternate designs are acceptable if the drawings are sealed and signed by a registered professional engineer and shall not deviate from the functional dimensions shown on the plans.

MATERIALS:

1. Concrete: All concrete shall conform to the provisions of Item 300, "Concrete (Class A)".
2. Reinforcing Steel: all reinforcing steel shall conform to the provisions of Item 301, "Reinforcing Steel".
3. Membrane Curing Compound: All membrane curing compound shall conform to the provisions of Item 305. "Membrane Curing".
4. Cast Iron Castings: All cast iron castings shall conform to Item 409, "Cast Iron Castings".
5. Precast Reinforced Concrete Manhole Sections: All precast reinforced concrete manhole sections shall conform to the requirements of ASTM C-478. The precast sections shall have either tongue and groove joints or dove tail joints.
6. Mortar: Mortar shall be composed of one part of Portland Cement and not more than two parts of clean sharp mortar sand.
7. Plastic Joints: Plastic joints for reinforced concrete manhole sections shall conform to Item 401, "Storm Drainage Pipe".
8. Throat Rings: Adjustment throat rings shall be non-reinforced concrete rings having a maximum thickness of 2 inches. The internal diameter shall not be less than 24 inches and the width shall be a minimum of 5 inches. Concrete

shall conform to the provisions of Item 300, "Concrete (Class "A")".

TYPES:

The various types of manholes and inlets are designated on the plans by letters or by numbers indicating the particular design of each. Each type shall be constructed in accordance with the details shown on the plans and to the depth required by profile and schedules given.

CONSTRUCTION METHODS:

All concrete work shall be performed in accordance with the requirements of Item No. 307, "Concrete Structures", unless otherwise specified. Forms will be required for all concrete walls. Riser sections of Junction Box shall be jointed tightly and sealed with stiff mortar, so placed as to form a durable watertight joint, or shall be jointed with plastic joints as follows:

Plastic joints shall be made with Cold Applied, Plastic Asphalt Sewer Joint Compound or Cold Applied Preformed Plastic Gaskets meeting the requirements as set forth in Item 401, "Storm Drainage Pipe". Application of the jointing material and construction methods shall be strictly in accordance with the manufacture's recommendation.

MEASUREMENT:

All junction boxes and inlets satisfactorily completed in accordance with the plans and specifications will be measured by each junction

box or inlet, completed to the stage of construction required by the plans.

PAYMENT:

Payment for junction boxes and inlets will be paid for in accordance with item 403 "Storm Sewer Junction Boxes and Inlets" contract unit price bid per each complete in place for the type and size constructed. Said price shall be full compensation for furnishing, hauling and placing of junction boxes including risers and inlets at locations and on the grades indicated on the plans, for all excavation, and back filling, concrete, reinforcing steel, and cast iron castings.

BID ITEM:

Item 403.1: Junction Box 4'x4'x4'

Item 403.2: Junction Box 5'x5'x5'

Item 403.3: Junction Box 6'x6'x6'

Item 403.4: Junction Box 7'x7'x7'

Item 403.5: Junction Box 8'x8'x8'

Item 403.6: Special Junction Boxes

Item 403.10: Inlet 5'

Item 403.11: Inlet 10'

Item 403.12: Inlet 15'

Item 403.13: Inlet 20'

Item 403.14: Inlet 25'

Item 403.15: Inlet 30'

Item 403.16: Special Inlets